REMARKS

Applicant has amended claims 1, 2, 9, 18, 24, 30 and 35. Claims 1-9, 11-20, 22-26, 28-32, and 34-35 are pending.

The First Ground of Rejection

Prior to appeal, claims 1-9, 11-20, 22-26, 28-32 and 34-35 were rejected under 35 U.S.C. 103(a) as being unpatentable over Mathur (USPN 6,424,658) in view of Muller et al. (USPN 6,245,680). In the Decision on Appeal, the Board agreed with the Applicant that, even if combined, Mathur and Muller would not disclose or suggest Applicant's claimed invention.

The Second Ground of Rejection

In the Examiner's Answer, the Examiner raised a new grounds of rejection and rejected claims 1-9, 11-20, 22-26, 28-32 and 34-35 rejected under 35 U.S.C. 102(e) as being anticipated by Bass et al. (USPN 6,460,120). With respect to the second ground of rejection, at pg. 9 of the Decision, the Board correctly recognized Applicant's position that:

> *[I]n Bass, **all ingress frames received from the Ethernet interface are buffered using internal memory**, and all egress frames received from the switch fabric are buffered using external memory (Reply Br. 15). Thus, in Bass, the EPC determines the destination to forward the data frames, buffers the ingress frames using the internal memory and forwards the data frames to the destination, including when the destination requires forwarding the data using a switch. Similarly, the EPC buffers the egress frames using the external memory and forwards the data frames to the destination, including when the destination requires forwarding the data to the network.*

Nevertheless, at pg. 10, the Board affirmed the rejection of the claims under appeal in view of Bass. Specifically, the Board stated:

> *We find that Bass discloses a control unit which buffers data using an embedded memory internal to the integrated circuit when the destination requires forwarding the data to a second routing component of a router using a switch, and which buffers data in*

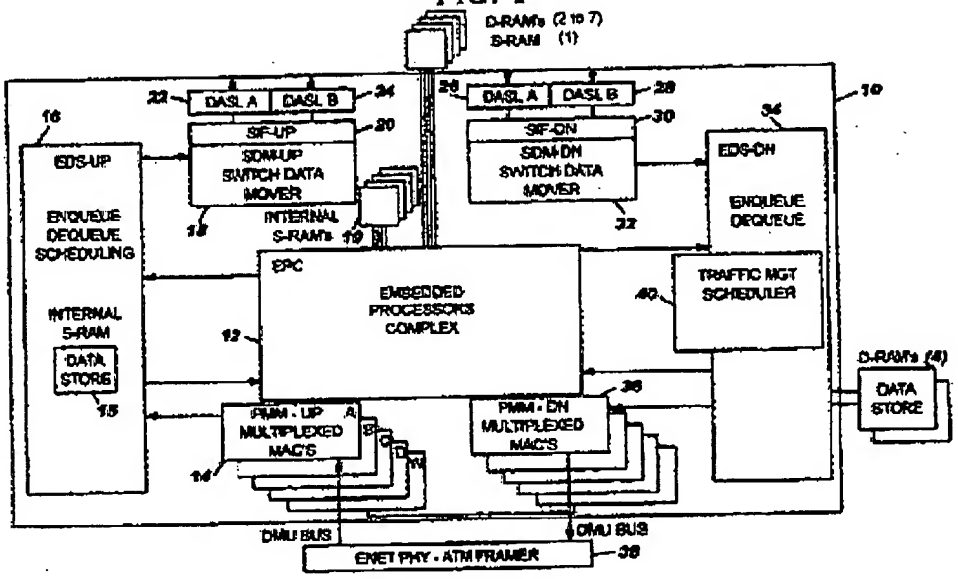
an external memory when the destination requires forwarding the data to the network via a first interface.

The Board explained that Appellant's arguments "are not commensurate with the invention that is claimed." Specifically, the Board stated that "Appellants appear to be arguing that the control unit buffers the data using the internal or external memory *only* when a particular destination requires forwarding the data" and that such a limitation does not appear in the claims.

Applicant respectfully submits that the Board overlooked certain limitations of Applicant's previously pending claims. Nevertheless, Applicant has amended the claims to clarify these elements. For example, claim 1 requires a routing component having a control unit that receives data from the network via the first interface and accesses a forwarding table to determine a network destination for the data. Amended claim 1 makes clears that the control unit buffers the data from the network using the embedded memory internal to the integrated circuit when the destination for the data from the network requires forwarding the data to the second routing component of the router as inbound data using the switch. Amended claim 1 further makes clear that the control unit buffers the data from the network in the external memory when the destination for the data from the network requires forwarding the data received from the network back to the network as outbound data via the first interface.

As acknowledged by the Board, Bass fails to teach or suggest these features in that, in Bass, all ingress frames received by the Ethernet interface of Bass are buffered using internal memory. To be clear, Bass describes an interface device chip having internal memory (15) and external memory (DRAM 4), as shown in FIG. 1 reproduced below:

FIG. 1



According to Bass, the arrows of FIG. 1 illustrate the data flow through the chip. (Bass at col. 7, ll. 23-24) Consistent with the arrows, Bass makes clear that **all** ingress traffic (traffic received from the Ethernet interface 38 located at the bottom of FIG. 1) is received by MAC's 14 and stored within internal S-RAM 15. (Bass at col. 7, ll. 25-26) Bass also makes clear that **all** egress traffic (traffic flowing downward and out the Ethernet interface 38) is stored within egress / external DRAM without basing any buffering decision on the particular destination.

Specifically, Bass states that **all** inbound frames are stored within the internal memory 15 without any regard to the destination of the frames:

> *The arrows show the general flow of data within the Interface device. Frames received from an Ethernet MAC are placed in internal Data Store buffers by the EDS-UP.* (Bass at col. 7, ll. 25-26)

Similarly, Bass also clearly states that **all** outbound frames are stored in external data store 4 without any regard to the destination of the frames:

> *Frames received from the switch fabric are placed in Egress Data Store (Egress DS) buffers by an Egress EDS (34) and enqueued to the EPC.* (showed coupled to 4 external D-RAMS in FIG. 1) (Bass at col. 8, ll. 46-48).

For at least these reasons, Bass fails to anticipate or even suggest a routing element having a control unit that accesses a forwarding table to determine a network destination for data received from the network and then: (1) buffers the data from the network using the embedded memory internal to the integrated circuit when the destination for the data from the network requires forwarding the data to the second routing component of the router as inbound data using the switch, and (2) buffers the data from the network in the external memory when the destination for the data from the network requires forwarding the data received from the network back to the network as outbound via the first interface, as required by claim 1.

Bass fails to anticipate or even suggest these elements. In Bass, data received from the Ethernet interface is always buffered using the internal memory. To this extent, the Bass router operates substantially different and does not suggest all of the elements required by the routing element recited by Appellant's claim 1.

Support for the amendment can be found throughout Applicant's specification. For example, the present application discloses that routers forward packets based on destination information within the packets in accordance with forwarding tables.[1] With respect to FIG. 2, the present application states that upon receiving an inbound packet via input link 4, routing component 12A "routes inbound packets received from inbound data path 22 to other routing components (not shown in FIG. 2) via outbound data path 24 and switch fabric 16, and may send the packets back out on an appropriate outbound link 6 via outbound data link 36 and WAN interface 14."[2] This makes clear that a packet received from the network via WAN interface 14 can be directed either to other routing components of the router via the switch fabric or back to the network via WAN interface 14. Thus, in such an embodiment, based on its destination, data received from the network on the WAN interface (e.g., inbound packets received from link 4) may be forwarded directly back to the network as outbound packets using a network interface of the same bandwidth (e.g., back to WAN interface 14) or forwarded to another routing component by the internal switch fabric 16 having a different bandwidth. The application also explains in detail that data to be forwarded to its destination as inbound data via the switch fabric is buffered

[1] Pg. 1, ll. 15-20.
[2] Pg. 6, ln. 26-pg. 7, ln. 5.

using an internal memory while data to be forwarded to its destination as outbound data via the WAN interface is buffered via external memory. (See, for example, pg. 7.)

CONCLUSION

All claims in this application are in condition for allowance. Applicant respectfully requests reconsideration and prompt allowance of all pending claims. Please charge any additional fees or credit any overpayment to deposit account number 50-1778. The Examiner is invited to telephone the below-signed attorney to discuss this application.

Date: June 16, 2008

By: _____

SHUMAKER & SIEFFERT, P.A.
1625 Radio Drive, Suite 300
Woodbury, Minnesota 55125
Telephone: 651.735.1100
Facsimile: 651.735.1102

Name: Kent J. Sieffert
Reg. No.: 41,312